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Canadian Forestry Service-Maritimes
TECHNICAL NOTE

FOREST NURSERY PRODUCTION AND SHIPMENTS IN THE MARITIMES, 1987

In 1987, 79.9 million seedlings were shipped from the 22 forest nurseries in the Maritimes; 2.5 million of these went to the state of Maine (Table 1). Compared to last year, production was down 10% in New Brunswick, up 14% in Nova Scotia, and up 32% in Prince Edward Island. Black spruce was the major species produced, comprising 52% of total shipments (Table 2, 3). Container stock comprised 80% of the total nursery production, and 76% of that was from overwintered crops. More containers crops are being overwintered (Table 4), increasing by 21% since 1985.

CHANGES IN PRODUCTION

There now are 6.3 ha of heated greenhouses, 1.1 ha unheated greenhouses, 1 ha shelterhouses, 5.2 ha shade area, and 18.6 ha open growing area in container production in Maritime forest nurseries (Table 5). The area used for the production of bareroot stock has been reduced to 22.1 ha in seedbed, and 45.2 ha in transplant beds, whereas the total area in production in 1984 was 157 ha.[1]

In Nova Scotia, the Department of Lands and Forests has been increasing nursery production, particularly by constructing additional greenhouses at the Strathlorne Forest Nursery in 1986 and 1987. A new greenhouse complex under construction at Musquodoboit will begin shipping stock in 1989. However, their shipment of bareroot stock has also increased by 125% from 1986 to 9 millions.

There are some changes occurring in New Brunswick forest nurseries which are reflected by a reduction of several millions. The production

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[1] Smyth, J.H. and A.J. Brownwright. 1986. Forest tree production centres in Canada-1985. Great Lakes Forestry Centre, Canadian Forestry Service, Information Report O-X-378.

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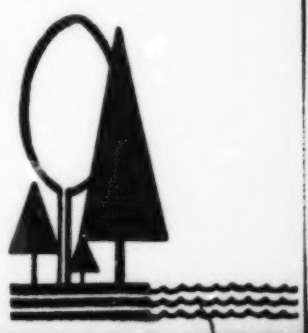

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of bareroot planting stock at the Juniper Tree Nursery was phased out in 1987. The output from the Provincial nurseries is being decreased somewhat, but this reflects a change to other silvicultural activities such as stand tending which is being increased on Crown forests.

The production of planting stock for Christmas trees is being turned over to private nurseries in New Brunswick, and a similar intent is suggested in Nova Scotia. Consequently, additional private nurseries have been established to grow balsam fir and some are also producing reforestation species. The price of Christmas tree planting stock from Provincial nurseries has been raised to market value. In New Brunswick, the home nursery has become a means of obtaining planting stock at less expense; some producers use wildings or grow their own seedlings for transplanting, while other purchase 2+0 balsam fir seedlings from the Provincial nursery.

OVERWINTERING LOSSES

Most Maritime nurseries reported negligible losses of overwintered container stock in the spring of 1987. However, 6 nurseries did have significant losses of container stock, totalling 4 million seedlings. The ability to overwinter container crops safely has become a major concern of forest nursery managers in this region, as well as other parts of Canada. Research and development must be continued to improve techniques and knowledge.

NEWFOUNDLAND

The Province of Newfoundland has been expanding its facilities, principally greenhouses at the Wooddale Provincial nursery. Production in Newfoundland has risen from 5.7 million in 1984 to 13.7 million in 1987. Container seedlings were 43% of the total in 1984, and 58% in 1987. The production by species was 74% black spruce, 20% white spruce, and 5% jack pine.

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June 1988

Table 1. Shipments of seedlings from Maritime forest nurseries by province, agency, and production type, 1987.

Province and agency	Seedling shipment ('000)			
	Container			
	Overwinter	Current	Bareroot	Total
NEW BRUNSWICK				
N.B. Natural Resources				
- Kingsclear	7 439	2 870	3 786	14 095
- Madran	4 529	2 664		7 193
- Kent	4 262	3 238		7 50
Frasers Inc.	5 585			5 585
Georgia Pacific Corp.	651			651
J.D. Irving Ltd. - Juniper	5 147	3 489	3 178	11 814
- Sussex		888		888
MacTavish Equipment Ltd.	400			400
Mann Brothers	350			350
NBIP Forest Products Ltd.	791	267		1 058
Valley Forest Products Ltd.	155			155
Canada East Nurseries			18	18
TOTAL	**29 309**	**13 416**	**6 982**	**49 707**
NOVA SCOTIA				
N.S. Lands & Forests				
- Lawrencetown	1 182	232	4 810	6 224
- Strathlorne	3 704	482	4 157	8 343
- Wittenburg	2 450	447		2 897
Bowater Mersey	784			784
Stora Inc.				
- Morrison's	1 712			1 712
- Westenenk's	1 677			1 677
Octa Evergreens Ltd.*	833			833
Scott Paper Inc.**	4 402	500		4 902
TOTAL	**16 744**	**1 661**	**8 967**	**27 372**
PRINCE EDWARD ISLAND				
J.F. Gaudet Forest Nursery	2 425		358	2 783
GRAND TOTAL	**48 478**	**15 077**	**16 307**	**79 862**

* 0.45 million trees shipped to Maine
** 2.1 million trees shipped to Maine

Table 2. Shipments of seedlings from Maritime forest nurseries by species and production type, 1987.

	Seedling shipment ('000)			
	Container			
Species	Overwinter	Current	Bareroot	Total
Black spruce	25 563	11 327	5 073	41 963
Red spruce	2 635	68	2 238	4 941
Norway spruce	1 431	949	739	3 119
White spruce	4 506	574	1 442	6 522
Balsam fir	711		3 207	3 918
Fraser fir	130			130
Austrian pine	91			91
Jack pine	8 405	650	680	9 735
Red pine	4 099	681	2 391	7 171
Scots pine	47		70	117
White pine	127	9	435	571
Eastern larch	678	819	4	1 501
Japanese larch	55			55
Hybrid Poplar			28	28
TOTAL	**48 478**	**15 077**	**16 307**	**79 862**

Table 3. Shipments of seedlings from Maritime forest nurseries by species and province, 1987.

	Seedling shipment ('000)			
Species	New Brunswick	Nova Scotia	Prince Edward Island	Total
Black Spruce	30 006	11 098	859	41 963
Red spruce	53	4 888		4 941
Norway spruce	1 433	1 686		3 119
White spruce	1 378	4 602	542	6 522
Balsam fir	3 097	580	241	3 918
Fraser fir	130			130
Austrian pine			91	91
Jack pine	9 533	202		9 735
Red pine	2 658	3 919	594	7 171
Scots pine	115	2		117
White pine	304	225	42	571
Eastern larch	1 000	115	386	1 501
Japanese larch		55		55
Hybrid poplar			28	28
TOTAL	**49 707**	**27 372**	**2 783**	**79 862**

Table 4. Container seedlings overwintered during 1987-88 in Maritime forest nurseries by province and agency.

Province	Agency		('000)
NEW BRUNSWICK			
	N.B. Natural Resources		
	- Kingsclear	16 212	
	- Madran		4 601
	- Kent		4 920
	Frasers Inc.		8 221
	Georgia Pacific Corp.		1 065
	J.D. Irving Ltd. - Juniper		6 439
	- Sussex		800
	MacTavish Equipment Ltd.		400
	Mann Brothers		200
	NBIP Forest Products Ltd.		791
	Valley Forest Products Ltd.		330
			43 979
NOVA SCOTIA			
	N.S. Lands & Forests -Lawrencetown		2 980
	-Strathlorne		17 746
	-Wittenburg		5 111
	Bowater Mersey		608
	Octa Evergreens Ltd.		1 370
	Scott Paper Inc.		8 102
	Stora Inc.		
	-Morrison's		3 640
	-Westenenk's		3 243
			39 150
PRINCE EDWARD ISLAND	J.F. Gaudet Forest Nursery		2 682
TOTAL			**89 461**

Table 5. Types of facilities and area for container production in Maritime forest nurseries, 1987.

	Area (m^2)				
	Heated house	Unheated house	Shelter house	Shade area	Open holding area
New Brunswick	35 243	6 820	4 506	28 187	103 282
Nova Scotia	23 823	3 904	5 420	23 650	75 871
Prince Edward Island	3 717				6 900
TOTAL	**62 783**	**10 724**	**9 926**	**51 837**	**186 053**